

AMENDMENTS TO CLAIMS

Please amend the claims as follows.

1. (currently amended) A peptide having an amino acid sequence selected from the group consisting of MYRPPAANVDPW (SEQ ID NO:76), SSPPDLTTRTP (SEQ ID NO:77), ATTQSTPPAFHL (SEQ ID NO:78), SDLPHVSSYWRG (SEQ ID NO:79), TTTQFMEIRQSA (SEQ ID NO:80), GKTWKASDEDWT (SEQ ID NO:81), DP ARILGRIFL (SEQ ID NO:82), YNLQPTTSARPT (SEQ ID NO:83), SLKTPTTSHLSQ (SEQ ID NO:84), TFDLRNNTHRNP (SEQ ID NO:85), SVSVGMKPSRP (SEQ ID NO:86), RRQRR (SEQ ID NO:97), RRQRRQRR (SEQ ID NO:98), RRQRRQRRQRR (SEQ ID NO:99).

2. (original) The peptide of claim 1 wherein said peptide facilitates cellular internalization of a cargo linked thereto.

3. (canceled)

4. (canceled)

5. (original) The peptide of claim 1 wherein the peptide provides for nuclear translocation in a target cell.

6. (currently amended) A peptide-cargo complex comprising a peptide and a cargo wherein the peptide has an amino acid sequence selected from the group consisting of MYRPPAANVDPW (SEQ ID NO:76), SSPPDLTTRTP (SEQ ID NO:77), ATTQSTPPAFHL (SEQ ID NO:78), SDLPHVSSYWRG (SEQ ID NO:79), TTTQFMEIRQSA (SEQ ID NO:80), GKTWKASDEDWT (SEQ ID NO:81), DPARILGRIFL (SEQ ID NO:82), YNLQPTTSARPT (SEQ ID NO:83), SLKTPTTSHLSQ (SEQ ID NO:84), TFDLRNNTHRNP (SEQ ID NO:85),

~~SVSVGMKPSRP (SEQ ID NO:86), RRQRR (SEQ ID NO:97), RRQRRQRR (SEQ ID NO:98), RRQRRQRRQRR (SEQ ID NO:99).~~

7. (original) The peptide-cargo complex of claim 6 wherein the cargo is selected from the group consisting of a polynucleotide, a polypeptide, a small molecule, a virus, a modified virus, a viral vector, and a plasmid.

8. (original) The peptide-cargo complex of claim 6 wherein the cargo is a virus selected from the group consisting of adenovirus, adeno-associated virus, herpes simplex virus, and retrovirus.

9. (original) The peptide-cargo complex of claim 6 wherein the cargo is selected from the group consisting of therapeutic proteins, suicide proteins, tumor suppressor proteins, transcription factors, kinase inhibitors, kinases, cell cycle regulatory proteins, apoptotic proteins, anti-apoptotic proteins, viral antigens, cellular antigens, differentiation factors, immortalization factors, toxins, antibodies and inhibitors of NF- κ B.

10. (original) The peptide-cargo complex of claim 6 wherein the peptide facilitates cellular internalization of cargo linked thereto.

11. (original) The peptide-cargo complex of claim 6 wherein the peptide provides for nuclear translocation of said peptide-cargo complex in a target cell.

12. (currently amended) The peptide-cargo complex of claim 6 wherein the peptide ~~is biotinylated~~ and the cargo ~~is avidin-labeled~~ are linked by an avidin bridge.

13. (original) The peptide-cargo complex of claim 9, wherein the cargo is an apoptotic protein selected from the group consisting of p53, caspase-3, HSV thymidine kinase and an antimicrobial peptide.

14. (original) The peptide-cargo complex of claim 6 wherein the cargo is glutathione.
15. (canceled)
16. (canceled)
17. (currently amended) The peptide-cargo complex of claim 6 12 wherein the peptide ~~is biotinylated~~ and the cargo ~~is avidin-labeled~~ are linked by an avidin bridge.
- 18 -41. (canceled).
42. (amended) An immunogen comprising a peptide-cargo complex wherein said peptide has an amino acid sequence selected from the group consisting of
~~MYRPPAANVDPW (SEQ ID NO:76), SSPPDLTTRTP (SEQ ID NO:77),~~
~~ATTQSTPPAFHL (SEQ ID NO:78), SDLPHVSSYWRG (SEQ ID NO:79),~~
~~TTTQFMEIRQSA (SEQ ID NO:80), GKTWKASDEDWT (SEQ ID NO:81),~~
~~DPARILGRIFL (SEQ ID NO:82), YNLQPTTSARPT (SEQ ID NO:83),~~
~~SLKTPTTSHLSQ (SEQ ID NO:84), TFDLRNNTHRNP (SEQ ID NO:85),~~
~~SVSVGMKPSRP (SEQ ID NO:86), RRQRR (SEQ ID NO:97), RRQRRQRR (SEQ ID~~
~~NO:98), RRQRRQRRQRR (SEQ ID NO:99).~~
43. (canceled).
44. (canceled)
45. (original) The immunogen of claim 42 wherein the cargo is selected from the group consisting of a polynucleotide, a polypeptide, a protein, a virus, a modified virus, a viral vector, and a plasmid.
46. (original) The immunogen of claim 42 wherein the cargo is an antigen.

47. (original) The immunogen of claim 42 wherein the cargo is an HIV protein selected from the group consisting of Gag, Pol, Env, Tat, Nef, Vpr, Vpv, Rev.

48-50. (canceled)

51. (new) A purified peptide, the sequence of which is RRQRR (SEQ ID NO:97).

52. (new) A peptide-cargo complex comprising a peptide and a cargo wherein the sequence of the peptide is RRQRR (SEQ ID NO:97).

53. (new) The peptide-cargo complex of claim 52 wherein the cargo is selected from the group consisting of a polynucleotide, a polypeptide, a small molecule, a virus, a modified virus, a viral vector, and a plasmid.

54. (new) The peptide-cargo complex of claim 52 wherein the cargo is a virus selected from the group consisting of adenovirus, adeno-associated virus, herpes simplex virus, and retrovirus.

55. (new) The peptide-cargo complex of claim 52 wherein the cargo is selected from the group consisting of therapeutic proteins, suicide proteins, tumor suppressor proteins, transcription factors, kinase inhibitors, kinases, cell cycle regulatory proteins, apoptotic proteins, anti-apoptotic proteins, viral antigens, cellular antigens, differentiation factors, immortalization factors, toxins, antibodies and inhibitors of NF- κ B.

56. (new) The peptide-cargo complex of claim 52 wherein the peptide facilitates cellular internalization of cargo linked thereto.

57. (new) The peptide-cargo complex of claim 52 wherein the peptide provides for nuclear translocation of said peptide-cargo complex in a target cell.

58. (new) The peptide-cargo complex of claim 52 wherein the peptide and the cargo are linked by an avidin bridge.

59. (new) The peptide-cargo complex of claim 52, wherein the cargo is an apoptotic protein selected from the group consisting of p53, caspase-3, HSV thymidine kinase and an antimicrobial peptide.

60. (new) The peptide-cargo complex of claim 52 wherein the cargo is glutathione.

61. (new) The peptide-cargo complex of claim 52 wherein the peptide is biotinylated and the cargo is avidin-labeled.

62. (new) An immunogen comprising a peptide-cargo complex wherein the sequence of said peptide is RRQRR (SEQ ID NO:97).

63. (new) The immunogen of claim 62 wherein the cargo is selected from the group consisting of a polynucleotide, a polypeptide, a protein, a virus, a modified virus, a viral vector, and a plasmid.

64. (new) The immunogen of claim 62 wherein the cargo is an antigen.

65. (new) The immunogen of claim 62 wherein the cargo is an HIV protein selected from the group consisting of Gag, Pol, Env, Tat, Nef, Vpr, Vpv, Rev.